CLAIMS

1. Apparatus for aiding in the identification of tissue type for an anomalous tissue in an impedance image comprising:

means for providing a polychromic immitance map of a portion of the body;

means for determining a plurality of polychromic measures of an anomalous region of the immitance image; and

a display which displays an indication based on said plurality of polychromic measures.

2. Apparatus according to claim 1 including means for providing a map of said polychromic measures and wherein said indication includes a display of a plurality of said maps.

3. Apparatus according to claim 2 wherein said display includes an overlay of maps of said polychromic measures.

4. Apparatus according to claim 3 and including means for matching the values of the plurality of measures with predetermined values of the measures to identify the tissue type of the anomalous tissue.

5. Apparatus according to claim 4 wherein the values of the measures are normalized values.

6. Apparatus according to claim 4 wherein the indication is the display of a map of said determined tissue type.

7. Apparatus for determining a tissue type for an anomalous tissue comprising:

means for determining a plurality of polychromic measures of the anomalous tissue; and

means for matching the values of the plurality of measures with predetermined values of the measures to identify the tissue type of the anomalous tissue.

8. Apparatus according to claim 7 wherein the values of the measures are normalized values.

9. Apparatus according to claim 7 wherein one of the polychromic measures is derived from the frequency at which the capacitance spectrum of the anomaly crosses a capacitance spectrum of typical nonanomolous regions.

10. Apparatus according to claim 7 wherein one of the polychromic measures is derived from the integrated deviation of the capacitance or conductance of the anomaly from that of typical nonanomolous regions.

11. Apparatus according to claim 10 wherein one of the polychromic measures is derived from the sum, over a plurality of frequencies, of the positive deviations of the capacitance of the anomaly from that of typical nonanomolous regions.

12. Apparatus according to claim 10 wherein one of the polychromic measures is derived from the sum, over a plurality of frequencies, of the negative deviations of the capacitance of the anomaly from that of typical nonanomolous regions.

13. Apparatus according to claim 10 wherein one of the polychromic measures is derived from the sum, over a plurality of frequencies, of the positive deviations of the conductance of the anomaly from that of typical nonanomolous regions.

14. Apparatus according to claim 7 wherein one of the measures is the integral of the phase or the sum of phase values over a range of frequencies.

15. Apparatus according to claim 7 wherein one of the measures is the difference between the integral of the difference between the phase at a point and the mean or median value of the phase in the image, over a range of frequencies.

16. Apparatus according to claim 7 wherein one of the measures is the derivative of the capacitance curve or its logarithm as a function of frequency, evaluated at a given frequency.

17. Apparatus according to claim 7 wherein one of the measures is the derivative of the conductance curve or its logarithm as a function of frequency, evaluated at a given frequency.

18. Apparatus according to claim 7 wherein one of the measures is a frequency at which the phase of the impedance reaches a specified value.

19. Apparatus according to claim 16 wherein the specified value is 45 degrees.

20. A method of determining a tissue type for tissue in an anomalous region in an immitance image, comprising:

determining a plurality of polychromic measures of said anomalous region; and

matching the values of the plurality of measures with predetermined values to identify the tissue type of the anomalous region.

21. A method of determining a tissue type for an anomalous tissue:

determining a plurality of polychromic measures of the anomalous tissue;

matching the values of the plurality of measures with predetermined values to identify the tissue type of the anomalous tissue.

22. A method according to claim 21 wherein one of the polychromic measures is derived from the frequency at which the capacitance spectrum of the anomaly crosses a capacitance spectrum of typical nonanomolous regions.

23. A method according to any of claim 21 wherein one of the

polychromic measures is derived from the integrated deviation of the capacitance or conductance of the anomaly from that of typical nonanomolous regions.

24. A method according to claim 23 wherein one of the polychromic measures is derived from the sum, over a plurality of frequencies, of the positive deviations of the capacitance of the anomaly from that of typical nonanomolous regions.

25. A method according to claim 23 wherein one of the polychromic measures is derived from the sum, over a plurality of frequencies, of the negative deviations of the capacitance of the anomaly from that of typical nonanomolous regions.

26. A method according to claim 23 wherein one of the polychromic measures is derived from the sum, over a plurality of frequencies, of the positive deviations of the conductance of the anomaly from that of typical nonanomolous regions.

27. A method according to claim 21 wherein one of the measures is the integral of the phase or the sum of phase values over a range of frequencies.

28. A method according to claim 21 wherein one of the measures is the difference between the integral of the difference between the phase at a point and the mean or median value of the phase in the image, over a range of frequencies.

29. A method according to claim 21 wherein one of the measures is the derivative of the capacitance curve or its logarithm as a function of frequency, evaluated at a given frequency.

30. A method according to claim 21 wherein one of the measures is the derivative of the conductance curve or its

logarithm as a function of frequency, evaluated at a given frequency.

31. A method according to claim 21 wherein one of the measures is a frequency at which the phase of the impedance reaches a specified value.

32. A method according to claim 31 wherein the specified value is 45 degrees.

33. A method according to claim 21 wherein the values of the measures are normalized values.